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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,163	09/23/2003	Hong Q. Hou	1613370-0019 DIV	2840
7470 7.	590 01/11/2005		EXAMINER	
WHITE & CA		NGUYEN, CUONG QUANG		
PATENT DEPARTMENT 1155 AVENUE OF THE AMERICAS NEW YORK, NY 10036			ART UNIT	PAPER NUMBER
			2811	
			DATE MAIL ED: 01/11/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/670,163	HOU ET AL.				
Office Action Summary	Examiner	Art Unit				
	Cuong Q. Nguyen	2811				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) . Responsive to communication(s) filed on	1) Responsive to communication(s) filed on					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 43-48 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 43-48 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) ☐ The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s)/Mail Da 5)  Notice of Informal Pa 6) Other:	te atent Application (PTO-152)				

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims are rejected under 35 U.S.C. 102(b) as being anticipated by Shigihara (US 6,249,140).

Regarding claim 43, Shigihara discloses a process for manufacturing a semiconductor device that has performance characteristics that may vary durng the initial period of operation, a method for stabilizing the device comprising: (a) applying a test current (driving current) to the semiconductor device for a brief period of time; and repeating step (a) above at an incremental current over the test current until the test current is above the normal operating current of the semiconductor device. See Shigihara's col.2 lines 50-55 and Fig.1.

It is noted that when the threshold current decreases, the test current is over the normal operation current. Regarding claim 44, as shown in Shigihara's Fig.1, the method further comprising providing an elevated ambient temperature for the semiconductor device during the steps of providing a sequence of test currents.

## Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigihara.

Regarding claim 45, 46 and 48, Shigihara does not explicitly teach that wherein the dwell time of each application of a test current is about 15 ms; the number of cycles of providing a test current is about four; and the scan current ramp rate, the number of scans per device, the dwell time, the peak value of input current, and the ambient temperature are adjusted for each process.

It would have been obvious to one of ordinary skill in the art to provide the dwell time and number of cycles and the scan current ramp rate, the number of scans per device, the dwell time, the peak value of input current, and the ambient temperature are adjusted for each process as claimed because these parameters are important subject matter for the testing process which would have been determinable by one of ordinary skill in the art through no more than routine experimentation. See In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 47, Shigihara teaches that the device under testing process is a laser device. However, Shigihara does not explicitly teach that the laser device is a vertical cavity surface emitting laser device.

It would have been obvious to one of ordinary skill in the art to apply the testing process to the vertical cavity laser device because, the testing process as taught by Shigihara can be applied to all laser device.

Claims 1,2,4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (Re 35,665) in view of Sugawara et al. (5,048,035).

### Conclusion

3. Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 872-9306. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.

Art Unit: 2811

4. Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to CUONG Q NGUYEN whose telephone number is (571) 272-1661. The Examiner is in the Office generally between the hours of 6:30 AM to 5:00 PM (Eastern Standard Time) Monday through Thursday.

- 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Eddie Lee who can be reached on (571) 272-1732.
- 6. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center Receptionists whose telephone number is 308-0956.

Cuong Nguyen

Primary examiner

1/7/05